WEEKLY PROGRESS UPDATE
FOR SEPTEMBER 22 – SEPTEMBER 26, 2003

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from September 22 through September 26, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of September 26 is summarized in Table 1.

Table 1. Drilling progress as of September 26, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-282	Western Boundary (CBP-6)	392	204	206-216; 310-320
MW-286	J-1 Range (J1P-19)	317	193	122-132; 205-215; 259-269
MW-290	L Range (LP-12)	298	235	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-282 (CPB-6) and MW-286 (J1P-19), completed drilling of MW-290 (LP-12). Well development continued for recently installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-290. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, and as part of the August round of the Draft 2003 Long-Term Groundwater Monitoring Plan. Soil samples were collected from grids along Canal View Road and at Gun Position 19. Investigation-derived waste (IDW) samples were collected from the Groundwater Activated Carbon (GAC) treatment system.

The following are the notes from the September 25, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gonser (IAGWSPO)
Ben Gregson (IAGWSPO)
Dave Hill (IAGWSPO)
Bill Gallagher (IAGWSPO)
Paul Nixon (IAGWSPO)
LTC Bill FitzPatrick (E&RC)
Todd Borci (EPA)
Meghan Cassidy (EPA)
Bob Lim (EPA)
Jane Dolan (EPA)
Desiree Moyer (EPA)
Jim Murphy (EPA)
Len Pinaud (MADEP)
Mark Panni (MADEP)
Dave Williams (MDPH)
Frank Fedele (ACE)
Ed Wise (ACE)
Heather Sullivan (ACE)
Katarzyna Chelkowska (ACE)
Dave Margolis (ACE)
Darrin Smith (ACE)
Kim Harriz (AMEC)
Paul Hunt (ECC)
Dick Skryness (ECC-phone)
Darren Smith (ECC)
Larry Pannell (Jacobs-phone)
Kevin Hood (Univ. Conn)

Punchlist Items

#3 Provide date for submittals of J-2 Range RRA Work Plan (ACE). Plan will be submitted today.

#4 Provide date for sampling J-1 Range private well (ACE). Homeowner has indicated they do not have a well, but their neighbor has a well. Dave Margolis (ACE) to check on status of the letter to neighbor.

#6 Request access to Schooner Pass Assoc. property to install a monitoring well (IAGWSP). Len Pinaud (MADEP) drafted a letter requesting access for the Army to enter the property for the purpose of sampling and/or the installation of groundwater monitoring wells. Letter from IAGWSP was on hold pending further discussion with the agencies. Discussed further as part of the Northwest Corner update.

#7 Provide groundwater travel time from MW-279 to the canal (ACE). Travel time from the shallow well to the canal is estimated at 3.6 years.

Fieldwork Update

Frank Fedele (ACE) provided an update on the IAGWSP fieldwork, distributing a one-page summary.

- Well installation was completed at J1P-19 and CBP-6.
- AMEC Rig #2 competed BWD well WS4P-5 and is moving to LP-7, tomorrow, 9/26.
- AMEC Rig #4 is being deconned and is scheduled to set up on NWP-6 by tomorrow, 9/26.
- AMEC Rig #5 is scheduled to set-up at the Pew Rd extraction well EW-D1-2 early next week when the pad is completed.
- Soil sampling continues at the NW Corner grids. Supplemental BIP soil sampling will resume after completion of the NW Corner sampling.
- UXO crews were finishing clearance at the Demo 1 Fluidized Bed Reactor footprint and would move to complete clearance at the extraction well location.
- Pad construction will be conducted at NWP-6, today and LP-7, tomorrow.
- Well development continues at BWD well WS4P-6.
- Groundwater sampling was being conducted at Bourne, LTM and new wells.
- ECC continued drilling at LP-12 (MW-319); drilling is expected to continue through 9/30 at this location. Following completion of this well, the rig will move to LP-11.
- Well development at J2P-18 (MW-321) is scheduled for 9/29.
- Improvements along roads continued for J-3 Range. Road improvement was scheduled for Chadwick Road and Tank Alley next week. Jane Dolan (EPA) requested a road clearance schedule.
- Soil sampling at the J-3 Barrage Rocket site was scheduled to begin next week.
- Demolition of the Textron melt pour facility continued under monitoring by ECC. Completion is expected by 10/03.
- Anomaly removal and clearance continued at Demo 1. Clearance of grids E4, E5, E6, E7 was completed. Currently working on clearance in grids D4 and A7. Removal of deeper anomalies using an excavator was completed in grids B2, D1, C1 and A2.
- BIPs were completed at J-3 Range (3, 81MM Mortars) and Demo 1 (3.5-inch HEAT round). This week discoveries for eventual BIP included 40MM rounds off of the J-3 Range Road and a 4.2-inch mortar in Grid B2 at Demo 1, which had been located at 3 feet bgs.

ROA Status/Drilling Schedule

Heather Sullivan (ACE) provided an update on the ROA status and drilling schedule, distributing a 1-page drilling schedule and 2-page ROA status table.

- AMEC drilling rigs are distributed as follows: Rig #2 will be sent to LP-7. Rig #3 is expected back in October. Rig #4 is moving to NWP-6. Rig #5 will drill EW-D1-2.

- ECC drill rig will be completing LP-12 and moving to LP-11 during the second week of October. ECC will mobilize a second rig in Nov/early Dec., which is the earliest opportunity a second rig can be utilized efficiently.
- Karen Wilson (IAGWSPO) is reviewing swaths along Wood Road for pre-approval as drilling locations.
- ROAs for D2P-5 and D2P-6 have been submitted for Ms. Wilson's review.
- Currently drafting ROAs for J-2 Demo Area, NW Corner, Wood Road and an area between Wood Rd and MW-289. Dave Hill (IAGWSPO) indicated Jefferson Road was not currently under consideration as shown on a map of recommended proposed wells provided to the agencies earlier in the week. Jane Dolan requested that the IAGWSP proposed well locations be discussed in an after meeting and that the J-2 Range Investigation be added to the agenda for future Tech meetings.
- Heather Sullivan indicated the agencies request for the monitor wells to be numbered sequentially (requiring the renumbering of several wells assigned in the 300 series) and modification of the LOCID from WL to MW was being implemented.

Northwest Corner Update

Bill Gallagher (IAGWSPO) provided an update on the Northwest Corner investigation.

- Soil sampling on Canal View Road was in progress and had been reviewed by the agencies during the 9/23 site walk.
- All groundwater results were received for MW-283 & MW-284 and the results were provided in a summary table:
  - MW-283M1 Perchlorate 1.5 ppb (1.1/1.4 ppb in profile)
    RDX – ND
  - MW-284M2 Perchlorate 3.0 ppb (2.7 ppb in profile)
    RDX 0.34; (31.7 ppb, PDA NO with interference in profile)
  - MW-284M1 Perchlorate ND
    RDX 0.88 ppb (1.2 ppb, PDA YES with interference in profile)
- Todd Borci requested particle backtracks be generated for the MW-284M2, M1 screens and that explosives chromatograms for RSNW03 be reviewed for RDX detections below the reporting limit.
- A revised plume map with proposed well locations was distributed. As a result of the 9/23 site walk, the IAGWSPO and the agencies had agreed on three well locations, two upgradient of Canal View Road wells on Cat Rd (NWP-11, NWP-12) and one at the Canal View scenic overlook off of Rt 6A (NWP-10). Three other locations were still under consideration including NWP-8a, NWP-8b and NWP-9 as shown on the figure.
- No response had been received at the IAGWSPO from residential homeowners on Foretop Road regarding additional sampling of their wells.
- The IAGWSPO contacted the Bourne Regional Tech School regarding access to install a well on their property adjacent to well 4036011. The Schooner Pass Condominium Association had not been contacted for access, since the data showed that well 4036011 was already within the plume boundary and the IAGWSP was seeking to define the limits of the plume boundary.
- Todd Borci & Meghan Cassidy indicated EPA considered it important to understand as much about the groundwater quality in the proximity of well 4036011 as possible to be protective of the public. This information was being sought particularly in light of information showing concentrations of perchlorate immediately upgradient of the well above 4 ppb, the relatively short travel time estimated for groundwater migration from MW-279 to the canal, and the lack of definitive information on the screen depth of well 4036011. Len Pinaud (MADEP) supported EPA's position.

- Hap Gonser (IAGWSPO) indicated that the condominium members had the option to use their connection to the BWD to obtain water at any time. This switch could be made immediately if higher levels of perchlorate were seen in the well. Mr. Gonser further requested additional clarification on the objectives of installing a well adjacent to well 4036011.
- Todd Borci requested that information be sought regarding precisely how easily the condominium complex could use their connection to the BWD.
- All parties agreed the IAGWSPO would send a letter to the Condominium Association requesting a meeting to discuss access to the property for additional monitoring of the well and well installation.
- Information the BWD had requested regarding the Northwest Corner investigation would be provided by the IAGWSPO.

Western Boundary

Bill Gallagher (IAGWSPO) provided an update on the Western Boundary investigation, distributing 2 cross sections in the vicinity of WS-4 (at the request of the BWD).

- Weekly and monthly monitoring within the Monument Beach Wellfield continues.
- Aside from a one-time detection of perchlorate (0.37J ppb) in WS-1, there have been no detections of perchlorate in the supply wells since last year.
- Recent results from MW-276 (BP-3) showed perchlorate detected at the water table at 1.7 ppb.
- Profile results from MW-282 (CBP-6), which was installed along a backtrack from a perchlorate detection at MW-267, showed no detections of perchlorate. Screens were set at M1: HMX detection, PDA Yes with interference. M2 – depth of MW-267 perchlorate detection.
- The IAGWSPO is seeking to reduce the sampling frequency of wells in the Monument Beach Wellfield during the off-season.
- Mr. Gallagher proposed two changes in the scope of the Western Boundary investigation. One change was to move proposed well BP-6 to the CBP-3 location, and eliminate the BP-6 location from the characterization program. The new BP-6 location would then be utilized as a southern boundary well to the perchlorate detections. A second change was to eliminate the CBP-9 location, since the upgradient detection at BP-3 was at the water table. A figure showing the well locations in plan view and groundwater data from 10/02 was distributed.
- Meghan Cassidy expressed EPA's concern that the IAGWSPO was changing the criteria for delineating the Western Boundary perchlorate plume and recommended the IAGWSPO's proposal be discussed in an after Tech meeting discussion with the benefit of updated maps. Ms. Cassidy expected the IAGWSPO to provide justification for any proposal to drop contingency wells. The IAGWSPO agreed to provide updated cross sections prior to the proposed after Tech meeting to facilitate the discussion.
- The agencies requested the soil sampling proposed in the Bourne Perchlorate Response Plan be completed since the plan had been approved by the agencies in July.

Documents and Schedules

Heather Sullivan (ACE) reviewed general document and scheduling issues.

- Of highest priority are comments on the Demo 1 Soil Treatment Plan and the Groundwater Report Addendum (DEP only). A copy of the Groundwater Report Addendum to be forwarded to Len Pinaud (DEP).
- A CRM for the Demo 1 Soil RRA Plan SAP will likely not be needed, although Ms. Sullivan to review recently received DEP comments for any conflicts.
- RCL for Demo 1 GW RRA is scheduled to be sent out tomorrow, 9/26.
- EPA approval of the MSP3 G&M Work Plan MOR was received.

- HUTAI/2 RLSO's are being drafted. The Army Corps requested a meeting with Desiree Moyer (EPA) to go over responses.
- L Range Supplemental Groundwater Workplan MOR and Site-Wide Perchlorate Characterization Report RCL should be provided shortly.
- Demo 2 Interim Results Report was submitted last week.
- J-2 RRA Plan to be sent 9/24, not 9/19 as formerly reported.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. Perchlorate and explosive analyses for monitoring wells, and perchlorate, explosive and volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 3 summarizes only detects, and does not show samples with non-detects.

The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 3. PDA is a procedure that has been implemented for the explosive analysis, to reduce the likelihood of false positive identifications. Where the PDA status is “YES” in Table 3, the detected compound is verified as properly identified. Where the status is “NO”, the identification of an explosive has been determined to be a false positive. Where the status is blank, PDA has not yet been used to evaluate the detection, or PDA is not applicable because the analyte is a VOC or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

Table 3 includes detections from the following areas:

<u>Bourne Area</u>

- Groundwater samples from 02-02M2, 02-03M3, 02-09M1, M2 and duplicate, and MW-213M2 had detections of perchlorate. The results were similar to the previous sampling rounds.

<u>Impact Area</u>

- Groundwater samples from MW-203M2 had a detection of RDX that was confirmed by PDA spectra. This is the first detection of RDX in this well and the results were consistent with the profile results.

<u>Southeast Ranges</u>

- Groundwater Samples from MW-289M1 and M2 had detections of perchlorate. This is the first sampling event and the results were consistent with the profile data.

- Profile samples from MW-290 (LP-12) had detections of perchlorate and explosives. Of the explosive detections, 2,6-DNT was confirmed by PDA spectra in two intervals at 10 and 55 feet below the water table. HMX was detected and confirmed by PDA spectra at 108 feet below the water table. RDX was detected and confirmed by PDA, but with interference at 55 feet below the water table. TNT and 2,6-DNT were detected and confirmed by PDA spectra, but with interference at 108 and 125 feet below the water table. Perchlorate was detected at 125 and 155 feet below the water table. Well screens were set at the depth (5 to 15 ft bwt) of the water table, at the depth (50 to 60 ft bwt) corresponding to the RDX detection, at the depth (120 to 130ft bwt) corresponding to the shallowest perchlorate detections, and at the depth (150 to 160 ft bwt) corresponding to the deepest perchlorate detection.

Northwest Corner

- Groundwater samples from MW-284M1 and duplicate and MW-284M2 had detections of RDX that were confirmed by PDA spectra. This is the first sampling event for this well. The RDX detection in the M1 screen was consistent with the profile results. There were no PDA-confirmed detections of RDX in the profile results at a depth corresponding to the M2 screen.

DELIVERABLES SUBMITTED

Weekly Progress Update for September 8 – September 12, 2003	09/22/2003
MSP Phase 3 J-1 Range Polygons Final Investigation Report	09/22/2003
Draft J-2 Range Rapid Response Action Work Plan	09/26/2003
Weekly Progress Update for September 15 – September 19, 2003	09/26/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of September 29 include commence well installation at MW-290 (LP-12) and commence drilling at EW-275 (EW-D1-2), MW-287 (NWP-6), and MW-288 (LP-7). Groundwater sampling at Bourne water supply and monitoring wells, recently installed wells, and as part of the August round of the Draft 2003 Long-Term Groundwater Monitoring Plan will continue. Demo Area 1 UXO anomaly removal will also continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The IAGWSP is awaiting EPA and DEP comments on the Draft Groundwater Report Addendum for the Demo 1 Area Groundwater Operable Unit (OU). Modeling activities in support of the Feasibility Study (FS) are currently underway. DEP comments on the Groundwater RRA Plan were received on September 23, 2003 and a response to comments is being prepared. Geophysical anomaly excavation and removal within the Demo 1 Area depression continues. The Draft Soil Treatment Plan is currently being reviewed by EPA and DEP. Preliminary approval of Low Temperature Thermal Treatment, as a replacement for Soil Washing proposed in the Draft RRA Plan, was provided by EPA and DEP on September 26, 2003.

TABLE 2
SAMPLING PROGRESS
09/21/2003 - 09/27/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	09/22/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	09/22/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	09/22/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	09/22/2003	GROUNDWATER	108	128	6	12
MW00-4-A	00-4	09/25/2003	GROUNDWATER	64	70	38	44
MW00-4-D	00-4	09/25/2003	GROUNDWATER	64	70	38	44
OW00-1D-A	00-1D	09/25/2003	GROUNDWATER	91	97	48.3	54.3
SPRING1-A	SPRING1	09/22/2003	GROUNDWATER	0	0	0	0
TW00-1-A	00-1	09/25/2003	GROUNDWATER	64	70	52.1	58.1
TW00-2D-A	00-2	09/24/2003	GROUNDWATER	71	77	43.95	49.95
TW00-2S-A	00-2	09/24/2003	GROUNDWATER	29	35	1.17	7.17
TW01-2-A	01-2	09/24/2003	GROUNDWATER	50	56	24.5	30.5
TW1-88A-A	1-88A	09/22/2003	GROUNDWATER	102.9	102.9	67.4	67.4
TW1-88B-A	1-88B	09/22/2003	GROUNDWATER	105.5	105.5	69.6	69.6
TW1-88B-D	1-88B	09/22/2003	GROUNDWATER	105.5	105.5	69.6	69.6
W02-10M1A	02-10	09/23/2003	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	09/23/2003	GROUNDWATER	110	120	68.61	78.61
W02-10M3A	02-10	09/23/2003	GROUNDWATER	85	95	43.65	53.65
W02-12M1A	02-12	09/22/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	09/22/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	09/22/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	09/22/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	09/22/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	09/22/2003	GROUNDWATER	68	78	28.3	38.3
W113M1A	MW-113	09/25/2003	GROUNDWATER	240	250	98	108
W13DDA	MW-13	09/23/2003	GROUNDWATER	220	225	145	150
W213M3A	MW-213	09/22/2003	GROUNDWATER	77	82	29.38	34.38
W226M3A	MW-226	09/26/2003	GROUNDWATER	135	145	21.53	31.53
W233M1A	MW-233	09/26/2003	GROUNDWATER	356	366	157.8	167.8
W233M2A	MW-233	09/26/2003	GROUNDWATER	331	341	132.8	142.8
W233M3A	MW-233	09/26/2003	GROUNDWATER	231	241	32.8	42.8
W258M1A	MW-258	09/24/2003	GROUNDWATER	109	119	64.1	74.1
W258M2A	MW-258	09/24/2003	GROUNDWATER	87	92	42.2	47.2
W258M3A	MW-258	09/24/2003	GROUNDWATER	77	82	32.25	37.25
W269M1A	MW-269	09/25/2003	GROUNDWATER	207	217	31.55	41.55
W269M2A	MW-269	09/25/2003	GROUNDWATER	186	196	9.85	19.85
W269M2D	MW-269	09/25/2003	GROUNDWATER	186	196	9.85	19.85
W26SSA	MW-26	09/24/2003	GROUNDWATER	129	139	0	10
W28SSA	MW-28	09/24/2003	GROUNDWATER	95.17	105.2	0	10
W57DDA	MW-57	09/26/2003	GROUNDWATER	213	223	127	137

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 2
SAMPLING PROGRESS
09/21/2003 - 09/27/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W57M1A	MW-57	09/26/2003	GROUNDWATER	188	198	102	112
W57M2A	MW-57	09/26/2003	GROUNDWATER	148	158	62	72
W57M3A	MW-57	09/26/2003	GROUNDWATER	117	127	31	41
W65SSA	MW-65	09/25/2003	GROUNDWATER	116	126	1	11
W81DDA	MW-81	09/23/2003	GROUNDWATER	184	194	156	166
W81M1A	MW-81	09/23/2003	GROUNDWATER	128	138	100	110
W81M2A	MW-81	09/24/2003	GROUNDWATER	83	93	55	65
W81M3A	MW-81	09/23/2003	GROUNDWATER	53	58	25	30
W81SSA	MW-81	09/24/2003	GROUNDWATER	25	35	0	10
W82DDA	MW-82	09/25/2003	GROUNDWATER	125	135	97	107
W82M1A	MW-82	09/25/2003	GROUNDWATER	104	114	76	86
W82M2A	MW-82	09/26/2003	GROUNDWATER	78	88	50	60
W82M2D	MW-82	09/26/2003	GROUNDWATER	78	88	50	60
W82M3A	MW-82	09/25/2003	GROUNDWATER	54	64	26	36
W82SSA	MW-82	09/26/2003	GROUNDWATER	25	35	0	10
DW092303-NV	GAC WATER	09/23/2003	IDW	0	0		
DW092403-NV	GAC WATER	09/24/2003	IDW	0	0		
MW-290-01	MW-290	09/19/2003	PROFILE	105	105	10	10
MW-290-02	MW-290	09/19/2003	PROFILE	110	110	15	15
MW-290-03	MW-290	09/19/2003	PROFILE	120	120	25	25
MW-290-03FD	MW-290	09/19/2003	PROFILE	120	120	25	25
MW-290-04	MW-290	09/19/2003	PROFILE	130	130	35	35
MW-290-05	MW-290	09/19/2003	PROFILE	140	140	45	45
MW-290-07	MW-290	09/22/2003	PROFILE	150	150	55	55
MW-290-08	MW-290	09/22/2003	PROFILE	160	160	65	65
MW-290-09	MW-290	09/22/2003	PROFILE	170	170	75	75
MW-290-10	MW-290	09/22/2003	PROFILE	180	180	85	85
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108
MW-290-12	MW-290	09/23/2003	PROFILE	210	210	115	115
MW-290-13	MW-290	09/24/2003	PROFILE	220	220	125	125
MW-290-13FD	MW-290	09/24/2003	PROFILE	220	220	125	125
MW-290-14	MW-290	09/24/2003	PROFILE	230	230	135	135
MW-290-15	MW-290	09/24/2003	PROFILE	240	240	145	145
MW-290-16	MW-290	09/24/2003	PROFILE	250	250	155	155
MW-290-17	MW-290	09/24/2003	PROFILE	260	260	165	165
MW-290-18	MW-290	09/24/2003	PROFILE	270	270	175	175
MW-290-19	MW-290	09/25/2003	PROFILE	290	290	195	195
MW-290-20	MW-290	09/25/2003	PROFILE	298	298	203	203
HC199B1AAA	199B	09/24/2003	SOIL GRID	0	0.5		
HC199B1BAA	199B	09/24/2003	SOIL GRID	1.5	2		

Profiling methods include: Volatiles and Explosives
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TABLE 2
SAMPLING PROGRESS
09/21/2003 - 09/27/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HC199E1AAA	199E	09/23/2003	SOIL GRID	0	0.5		
HC199E1BAA	199E	09/23/2003	SOIL GRID	1.5	2		
HC199K1AAA	199K	09/23/2003	SOIL GRID	0	0.5		
HC199K1BAA	199K	09/23/2003	SOIL GRID	1.5	2		
HC199M1AAA	199M	09/23/2003	SOIL GRID	0	0.5		
HC199M1BAA	199M	09/23/2003	SOIL GRID	1.5	2		
HC199N1AAA	199N	09/23/2003	SOIL GRID	0	0.5		
HC199N1AAD	199N	09/23/2003	SOIL GRID	0	0.5		
HC199N1BAA	199N	09/23/2003	SOIL GRID	1.5	2		
HC199O1AAA	199O	09/24/2003	SOIL GRID	0	0.5		
HC199O1BAA	199O	09/24/2003	SOIL GRID	1.5	2		
HC199P1AAA	199P	09/24/2003	SOIL GRID	0	0.5		
HC199P1BAA	199P	09/24/2003	SOIL GRID	1.5	2		
HC199Q1AAA	199Q	09/24/2003	SOIL GRID	0	0.5		
HC199Q1BAA	199Q	09/24/2003	SOIL GRID	1.5	2		
HC66A1AAA	66A	09/25/2003	SOIL GRID	0	0.5		
HC66A1BAA	66A	09/25/2003	SOIL GRID	1.5	2		
HC66B1AAA	66B	09/25/2003	SOIL GRID	0	0.5		
HC66B1BAA	66B	09/25/2003	SOIL GRID	1.5	2		
HC66D1AAA	66D	09/25/2003	SOIL GRID	0	0.5		
HC66D1BAA	66D	09/25/2003	SOIL GRID	1.5	2		
HC66E1AAA	66E	09/26/2003	SOIL GRID	0	0.5		
HC66E1BAA	66E	09/26/2003	SOIL GRID	1.5	2		
HC66F1AAA	66F	09/25/2003	SOIL GRID	0	0.5		
HC66F1AAD	66F	09/25/2003	SOIL GRID	0	0.5		
HC66F1BAA	66F	09/25/2003	SOIL GRID	1.5	2		
HC66G1AAA	66G	09/26/2003	SOIL GRID	0	0.5		
HC66G1BAA	66G	09/26/2003	SOIL GRID	1.5	2		
HC66H1AAA	66H	09/26/2003	SOIL GRID	0	0.5		
HC66H1BAA	66H	09/26/2003	SOIL GRID	1.5	2		
HC66K1AAA	66K	09/26/2003	SOIL GRID	0	0.5		
HC66K1BAA	66K	09/26/2003	SOIL GRID	1.5	2		

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 08/29/03 - 09/27/03

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
MW-289M1	MW-289	09/18/2003	GROUNDWATER	305	315	203	213	8330N	RDX	YES
MW-289M1	MW-289	09/18/2003	GROUNDWATER	305	315	203	213	8330N	HMX	YES
MW-289M1	MW-289	09/18/2003	GROUNDWATER	305	315	203	213	E314.0	Perchlorate	
MW-289M1	MW-289	09/18/2003	GROUNDWATER	305	315	203	213	E314.0	Perchlorate	
MW-289M2	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	8330N	RDX	YES
MW-289M2	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	8330N	HMX	YES
MW-289M2	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	E314.0	Perchlorate	
MW-289M2	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	E314.0	Perchlorate	
MW-289M2D	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	8330N	RDX	YES
MW-289M2D	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	8330N	HMX	YES
MW-289M2D	MW-289	09/18/2003	GROUNDWATER	162	172	60	70	E314.0	Perchlorate	
MW-289S	MW-289	09/17/2003	GROUNDWATER	105	115	3	13	8330N	TNT	NO+
MW-289S	MW-289	09/17/2003	GROUNDWATER	105	115	3	13	8330N	Nitroglycerin	NO
W02-02M2A	02-02	09/18/2003	GROUNDWATER	94.5	104.5	42.65	52.65	E314.0	PERCHLORATE	
W02-03M3A	02-03	09/18/2003	GROUNDWATER	75	85	31.05	41.05	E314.0	PERCHLORATE	
W02-09M1A	02-09	09/18/2003	GROUNDWATER	74	84	65.26	75.26	E314.0	PERCHLORATE	
W02-09M2A	02-09	09/18/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-09M2D	02-09	09/18/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W203M2A	MW-203	09/10/2003	GROUNDWATER	176	186	32.58	42.58	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W213M2A	MW-213	09/19/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W284M1A	MW-284	09/12/2003	GROUNDWATER	115	125	90.55	100.55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W284M1D	MW-284	09/12/2003	GROUNDWATER	115	125	90.55	100.55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W284M2A	MW-284	09/12/2003	GROUNDWATER	45	55	21.2	31.2	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
MW-290-01	MW-290	09/19/2003	PROFILE	105	105	10	10	8330N	RDX	NO+
MW-290-01	MW-290	09/19/2003	PROFILE	105	105	10	10	8330N	2,6-Dinitrotoluene	YES
MW-290-01	MW-290	09/19/2003	PROFILE	105	105	10	10	8330N	2-Amino-4,6-dinitrotoluene	NO
MW-290-02	MW-290	09/19/2003	PROFILE	110	110	15	15	8330N	2-Amino-4,6-dinitrotoluene	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
PDA/YES = Photo Diode Array, Detect Confirmed
PDA/NO = Photo Diode Array, Detect Not Confirmed
*** = Interference in sample**
+ = PDAs are not good matches

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 08/29/03 - 09/27/03

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
MW-290-02	MW-290	09/19/2003	PROFILE	110	110	15	15	8330N	RDX	NO
MW-290-03	MW-290	09/19/2003	PROFILE	120	120	25	25	8330N	RDX	NO
MW-290-03D	MW-290	09/19/2003	PROFILE	120	120	25	25	8330N	RDX	NO
MW-290-04	MW-290	09/19/2003	PROFILE	130	130	35	35	8330N	RDX	NO
MW-290-05	MW-290	09/19/2003	PROFILE	140	140	45	45	8330N	RDX	NO
MW-290-07	MW-290	09/22/2003	PROFILE	150	150	55	55	8330N	RDX	YES+
MW-290-07	MW-290	09/22/2003	PROFILE	150	150	55	55	8330N	2,6-Dinitrotoluene	YES
MW-290-07	MW-290	09/22/2003	PROFILE	150	150	55	55	8330N	Nitroglycerin	NO
MW-290-07	MW-290	09/22/2003	PROFILE	150	150	55	55	8330N	2-Amino-4,6-dinitrotoluene	NO
MW-290-09	MW-290	09/22/2003	PROFILE	170	170	75	75	8330N	RDX	NO+
MW-290-09	MW-290	09/22/2003	PROFILE	170	170	75	75	8330N	2,6-Dinitrotoluene	NO+
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	2,4,6-Trinitrotoluene	YES+
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	HMX	YES
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	RDX	NO
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	Nitroglycerin	NO
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	2-Amino-4,6-dinitrotoluene	NO
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	2,6-Dinitrotoluene	YES+
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	PETN	NO
MW-290-11	MW-290	09/23/2003	PROFILE	203	203	108	108	8330N	Nitrobenzene	NO+
MW-290-13	MW-290	09/24/2003	PROFILE	220	220	125	125	8330N	2,6-Dinitrotoluene	YES+
MW-290-13	MW-290	09/24/2003	PROFILE	220	220	125	125	E314.0	Perchlorate	
MW-290-13D	MW-290	09/24/2003	PROFILE	220	220	125	125	8330N	2,6-Dinitrotoluene	YES+
MW-290-13D	MW-290	09/24/2003	PROFILE	220	220	125	125	E314.0	Perchlorate	
MW-290-16	MW-290	09/24/2003	PROFILE	250	250	155	155	8330N	RDX	NO+
MW-290-16	MW-290	09/24/2003	PROFILE	250	250	155	155	8330N	2,6-Dinitrotoluene	NO
MW-290-16	MW-290	09/24/2003	PROFILE	250	250	155	155	E314.0	Perchlorate	
MW-290-19	MW-290	09/25/2003	PROFILE	290	290	195	195	8330N	RDX	NO

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BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 08/29/03 - 09/27/03

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
MW-290-20	MW-290	09/25/2003	PROFILE	298	298	203	203	8330N	RDX	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
PDA/YES = Photo Diode Array, Detect Confirmed
PDA/NO = Photo Diode Array, Detect Not Confirmed
*** = Interference in sample**
+ = PDAs are not good matches